

CZECHOSLOVAKIA

VIETE, G.

Freiberg Mountain Academy (Bergakademie Freiberg), West Germany

Prague, Casopis pro mineralogii a geologii, No 4, 1964, pp  
485-496

"Glacigenic and Tectonic Dislocations as a Cause of the  
Origin of Landslides."

VIETH, H.

"Selection of Spawn and the Culture of Carp." p. 19, (GOSPODARKA RYBNA, VOL. 5, no. 8, Aug. 1953, Warszawa, Poland)

SO: Monthly Lists of East European Accessions, LC, Vol. 3, no. 5, May 1954/Uncl.

VIETH, H.

"The Fight Against Septicemia; The Culture of Carp with Genuine Immunity."  
P. 12. (GOSPODARKA RYBNA, Vol. 6, No. 8, Aug. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,  
No. 1, Jan. 1955 Uncl.

100 AND 100 CROISS  
 PROCESSES AND PROPERTIES INDEX  
 9

New systems in the field of the thermal treatment of steels. József Victorisz. *Anyagvizsgáló Közlöny* 18, (8) 10(1040). Transformations of austenite at const. subcritical temps. seem to have practical applications. The transformation is represented by an S-shaped time-temp. curve characteristic of each kind of steel. The upper part of the S-curve is the pearlite zone, then follow the martensite, the troostite and the bainite zones. Alloying elements except Co retard the transformation of austenite. The shape and location of the curves gives reliable information on the mechanical properties, depth of hardening, etc. S. S. de Fináiv

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION  
 100 AND 100 CROISS  
 100 AND 100 CROISS

9

Wartime high speed steels (East-Vietnam) were generally Alloy 22, 1-28(1944). At 10% Cr content the cutting capacity of steels alloyed with more than 1.2% C is deteriorated by increase of C content. Mn and Ni give poorer quality. The effect of Cu and Al is generally neutral. Ti (0.2-3.0%) very slightly improves quality. The cutting capacity is much increased by V, and Si has a good effect if Cr content is 8-10%. In this case even 1.0-1.2% Si can be alloyed.

István Finály

BC

A 7

Action of pancreatic juice on tubercle bacilli.  
K. VIKTORIN (Magyar Orvosi Arch., 1930, 34, 546—  
560; Chem. Zentr., 1931, i, 1933—1934).—Destructive  
fermentation takes place. A. A. ELBARON.

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM DIVISION

SECTION HAS ONLY USE

ABSTRACTION

FROM BOWLING

DIVISION ONE AND TWO

112

The action of pancreatic juice on tubercle bacilli. K. VERTOMAN. *Magyar Orvosi Arch.* 31, 546-60(1930).—The acid resistance is lost. Destruction and soln. take place as a result of digestion. The lipase digests the lipoid sheath of the bacilli, trypsin the protein part and diastase ferments the carbohydrates. H. TAUBER

VIETORISZ, R.

"Reduced-scale model of electric ventilation and the possibilities of its use in Hungarian coal mining." p. 252.

BANYASZATI LAPOK. (Magyar Banyaszati es Kohaszati Egyesulet). Budapest, Hungary, Vol. 12, No. 13, July 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,  
August 1959.  
Uncla.



MOTAS, C.

Karl Viets, 1882-1961; obituary. Biol glas 15 no. 4:  
A13-A15 '62.

1. Directeur de l'Institut de Speologie "Emil G. Racovita",  
Bucarest.

S/263/62/000/004,004,009  
1004/1204

AUTHOR: Vietze, Werner

TITLE: Compensation pressure transducer

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 32. Ismeritel'naya tekhnika, no. 4, 1962, 25, abstract 32.4.182 P. East German patent, class 42 r, 1/03, no. 20034, October 10, 1960

TEXT: The patent covers a multichamber membrane pressure transducer PD, the characteristic feature of which is that the input and the output pressure is connected to chambers C enclosed on the top and bottom by elastic membranes. The chambers have a cylindrical form and are located coaxially one above the other. The membranes are connected by a common rod, the lower end of which also forms a damper-nozzle system, fed by an auxiliary source. The output of this element is connected with the output of the C's and the PT output channels. Under operating conditions of the PT, balance of the rod is obtained when the input pressure multiplied by the number of input C's, is equal to the output pressure, multiplied by the number of output C's. The number of C's connected to the input and output of the PT may be varied by means of special multi-pass valves. The PT also contains a pressure controller for varying the zero level. For this purpose the output of the controller is supplied to the unused C's from the input or from the output. There is 1 figure. ✓

[Abstracter's note: Complete translation.]

Card 1/1

BULGARIA

FOMINA, A. Ya., and SOKAR, I. M. Kh, VIEV, [Abbreviation not identified,]  
Moscow, [USSR.]

"Comparative Studies of Hemagglutinating and Antigenic Properties of Some  
Atypical and Classical Strains of Newcastle Disease Virus."

Sofia, Veterinarna Sbirka, Vol 60, No 6, 1963; pp 4-6.

Abstract: Serologic studies with 3 vaccinal and 4 virulent strains of  
Newcastle Disease: erythrocyte agglutination studies of cells of hens,  
pigeons, turkeys, guinea hens, ducks; guinea pigs, mice, dogs, sheep,  
horses; frogs. All avian erythrocytes could be agglutinated; also those  
of mice and frogs to a lesser extent; not of mammals other than mice.  
Actual results varied with strain and animal, as shown in 2 graphs and  
table. Viral strains can be easily identified by their serologic reactions.

L 23353-66 EWP(v)/T/EWP(k)/EWP(h)/EWP(n)/EWP(l)/ETC(m)-6

ACC NR: AP6006519

(A)

SOURCE CODE: GE/0053/65/000/009/0359/0362

AUTHOR: Vieweg, Horst (Engr.)

ORG: none

TITLE: Standardization of a plan of coordination

SOURCE: Standardisierung, no. 9, 1965, 359-362

TOPIC TAGS: industrial management, automotive industry

ABSTRACT: The purpose of a plan of coordination<sup>14</sup> is to develop a basis which would induce those in positions of responsibility to use a systematic method. The most important function of a plan of coordination is to give a responsible leader the possibility to introduce necessary measures to a given branch of industry and to control the measures that have been introduced. Included in such a plan of coordination are: 1. elimination of contradictions between the new production output and existing standards; 2. standardizing the new production; 3. requirements for the supplying industry; 4. measures for production safety. The plan of coordination was tested in the automotive industry, in the development of the truck "IFA W 50", now being produced from 70% standardized parts at the Automobile Factory, Ludwigsfelde (VEB Automobilwerke), and it produced positive results. Orig. art. has: 5 fig.

SUB CODE: 05/ SUBM DATE: none

Card 1/1 *LC*

25  
B

2

VIEWEG, R.

Measurement, standardization, and production. II. Tr. from the German.  
(To be contd.) p.187.

ELEKTORTEHNSKI VESTNIK. ELECTROTECHNICAL REVIEW. Ljubliana, Yugoslavia.  
Vol. 27, no. 5/6, 1959.

Monthly List of East European Accessions (EEAI) LC Vol. 9, no. 2, Feb. 1960.

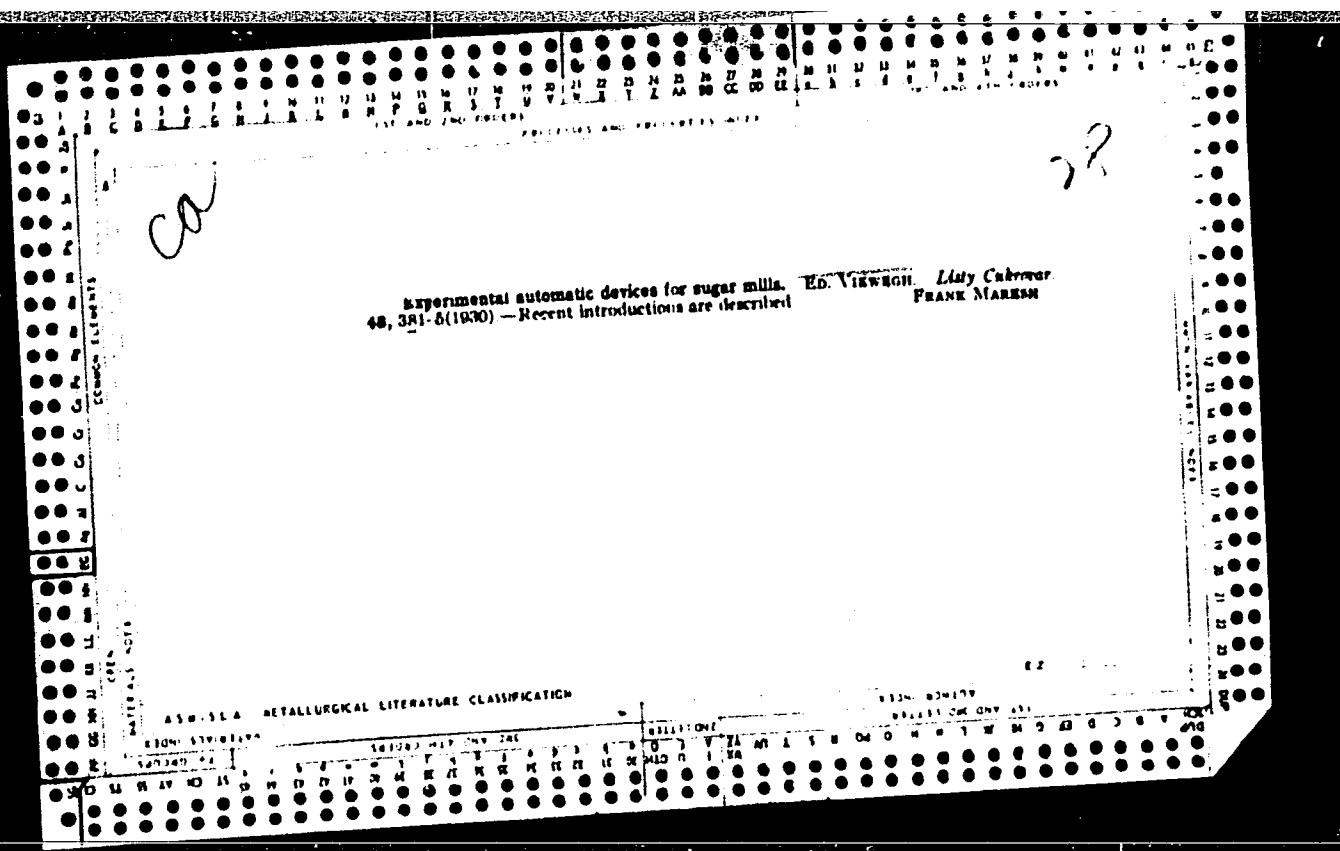
Uncl.

VIEWEG, Rainer; ZIEGLER, Vilmos [translator]

Processing hydrochloric acid waste. Magyar kem lap 18 no.2/3:  
85-89 P-Mr '63.

1. WEB KIB CHemia, Leipzig (for Vieweg). 2. Vegyimuvelket  
Tervezo Vallalat (for Ziegler).







CZERWINSKI, Witold; VIEWEGER, Hanna

Argentometric determination of 2-mercaptobenzothiazole in technical  
and crude products. Chem anal 5 no.6:1011-1019 '60.  
(EBAI 10:9)

1. Strussynski Analytical Department, Institute of General Chemistry,  
Warsaw.

(Argentometry) (Mercaptobenzothiazole)

VIEWEGER, Oskar; WROBLEWSKI, Janusz (Warszawa)

Effect of economic stimuli in building-assembling enterprises.

Pt. 1. Przegl budowl i bud mieszk 33 no. 10:621-624 0 '61.

VIEWEGER, O.; WROBLEWSKI, J. (Warszawa)

Effect of economic stimulants in building-assembling  
enterprises. Pt.2. Przegl budowl i bud mieszk 33 no.11:  
683-686 N '61.

VIEWEGH, R.

A contribution to the conversion of forests composed of trees growing from stumps to tall-trunk forests. p. 167. (SBORNIK RADA LESNICTVI. Praha) (Vol. 30, no. 2, Feb. 1957)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, No. 7, July 1957. Uncl.

"APPROVED FOR RELEASE: 09/01/2001

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APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859720002-7"

23(3,5)

SOV/77-4-4-5/19

AUTHOR:

Vifanskiy, Yu.K., and Gorokhovskiy, Yu.N.

TITLE:

Investigation on the Ability of Photographic Materials to Reproduce Small Optic Image Elements

PERIODICAL:

Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, 1959, Vol 4, Nr 4, pp 276-284 (USSR)

ABSTRACT:

The authors present methods and results of determining the distinguishing power of photographic material. For numerical evaluation of threshold dimensions of double measured details of different forms the authors use a quantity which is called "distinguishing power of photographic material". (Not to be mistaken for the quantity of F.L. Burmistrov, ref 6, which characterizes the photographic reproduction of isolated thin lines). The dimensionality of this quantity coincides with the dimensionality of the solving power ( $L^{-1}$ ). The measuring units also coincide ( $mm^{-1}$ ). The "distinguishing power" is marked by the Roman letter C (in Latin "cognosco"). For the numerical evaluation of the "distinguishing power of photographic materials" a

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SOV/77-4-4-5/19

Investigation on the Ability of Photographic Materials to  
Reproduce Small Optic Image Elements

special test was elaborated (Figure 1). It consists of 24 lines of figures of different shapes. Every line contains 20 figures. The dimensions of the figures change from line to line by geometric progression by 11%. The size of the figures in the first line of the test is 1.50 mm, in the 24. line only 0.13 mm. Tests were made for the following five contrasts (under "contrast"  $K_t = \frac{B_{max} - B_{min}}{B_{max}}$  : 1 (absolute con-

trast), 0.71 - 0.66, 0.36 - 0.34, 0.13, 0.07. Eight black and white photographic materials were tested (domestic and imported). The dependency of the solving power of photographic material from the object contrast at any contrast factors follows the formula of H. Frieser Ref 8. The results of three tested materials are given by the graphs in figure 7. These results testify the existence of a relation between the "distinguishing power" (C) and the solving power

Card 2/4  
3

SOV/77-4-4-5/19

Investigation on the Ability of Photographic Materials to  
Reproduce Small Optic Image Elements

(R). For statistic exploitation of this problem more than 32,000 tests of photographic images of the figures have been made. The results are given in figure 8. The recognition factor  $M$  (in %) is given for every kind of figure and the absolute number of tests ( $N$ ) for the figure. The relative area of the figure is also given by number (6). The area of the square, in which the figures are located, gets the number 100. The optimal density and exposition for the "distinguishing power" is a little higher than for the solving power. For this study the works of Mauge Ref 2, Istomin Ref 3, Perrin and Altman Ref 4 and Barrows Ref 5 were used. V.V. Levina and A.N. Tikhonov participated in this study. There are 2 diagrams, 6 graphs, 1 table and 8 references, 4 of which are Soviet 2 English, 1 German and 1 French.

Card 3/4  
3

*State Optical Inst in S. I. Vavilov*



VIFANSKIY, Yu.K.; GOROKHOVSKIY, Yu.N.; KHRUL'KOVA, N.D.

Investigating the capacity of photographic materials for reproducing small details of the optical image. Part 3: Effect of the positive printing conditions on the reproduction of two-dimensional objects. Zhur.nauch.i prikl. fot.i kin. 5 no.1:15-19 Ja-F '60. (MIRA 13:5)

1. Gosudarstvennyy opticheskiy institut imeni S.I.Vavilova.  
(Photographic sensitometry)

VIFANSKIY, Yu.K.; GOROKHOVSKIY, Yu.N.

Numerical evaluation of the sharpness of the photographic image.  
Zhur.nauch.i prikl.fot. i kin. 6 no.5:382-385 S-O '61. (MIRA 14:9)

1. Gosudarstvennyy opticheskiy institut imeni S.I. Vavilova.  
(Photography--Testing)  
(Photographic sensitometry)

VIFANSKIY, Yu.K.; GOROKHOVSKIY, Yu.N.

High speed recording microphotometer and its application. Zhur.nauch.  
i prikl.fto. i kin. 7 no.3:195-201 My-Je '62. (MIRA 15:6)

1. Gosudarstvennyy opticheskiy institut imeni S.I.Vavilova.  
(Microphotometer)

VIFANSKIY, Yu.K.; GOROKHOVSKIY, Yu.N.

Studying the physical sharpness of the photographic layer. Part 1:  
Methods of plotting the boundary curves and their evaluation.  
Zhur.nauch.i prikl.fot.i kin. 7 no.4:290-296 J1-Ag '62.  
(MIRA 15:8)

1. Gosudarstvennyy opticheskiy institut imeni S.I.Vavilova.  
(Photometry)

VIFANSKIY, Yu.K.; GOROKHOVSKIY, Yu.N.

Investigating the physical sharpness of the photographic image.

Part 2: Effect of the conditions of the carrying out of the  
black-and-white photographic process on the physical sharpness.

Zhur.nauch.i prikl.fot.i kin. 7 no.5:369-379 S-0 '62.

(MIRA 15:11)

1. Gosudarstvennyy opticheskiy institut imeni S.I.Vavilova.  
(Photography—Testing)

VIFANSKIY, Yu.K.; GOROKHOVSKIY, Yu.N.

Marginal curves and sharpness of black-and-white photographic images.  
Usp.nauch.fot. 10:58-67 '64. (MIRA 17:10)

JOSFAY, Gyorgy; EBERGENYI, Ilona; VIG, Aniko; KATONA, Eva; GUGCSO, Hilda(Csepel);  
KOKAY, Peterne; VESZPREMI, Barnane, dr.

Economical women - outstanding innovators. Ujit lap 13 no.24:12-13  
D '61.

1. Kerekpargyar technikusa, Csepel (for Ebergenyi) 2. Motorkerekpargyar  
technologusa, Csepel (for Vig) 3. Femmu kutatomernoke, Csepel (for  
Katona) 4. Ontode anyagbeszerzoje, Csepel (for Kokay) 5. Kozponti  
Anyavizsgalo kivalo dolgozoja (for Veszpremi).

MUNDI, Iozhef; KOMAR, Andrash; VI~~4~~, Arnad; VARGA, Iozhef; KANDO, Yanosh

We are proud of your success. Mast. ugl. 8 no.8:30 Ag '59.  
(MIRA 12:12)

1.Chleny profsoyusnoy delegatsii gornyakov Vengrii.  
(Hungary--Coal miners)



113, 2034

*2*

*Eden*

The Metohija soils. Viktor Nejebauer and Dordje Vug.  
(Inst. Agr. Research, Novi Sad, Yugoslavia). *Zemljopis i  
Bilja* 1, 187-222 (1952) (English summary).—The Metohija  
region lies near the Albanian border, in Serbia; the factors  
of soil formation and the genetic soil types and their pro-  
ductivity are discussed. The soils, where the rivers leave  
the canyons, are neutral and high in easily available P; they  
must be treated with org. manure. The most productive  
soil type is the one called "smonitsa" (I), it is found in the  
plateaus, contains 40-60% clay, and shows a slightly acid  
reaction. Due to erosion this type is carbonaceous. The  
brown-forest soils, red soils, and podzols are mostly acid and  
low in available P. They are preferably fertilized with  
Thomas meal. For agricultural purposes all these soils need  
drainage, but liming is required on only a few. I will show  
great improvement if treated with synthetic polyuronides,  
such as Kriliuni. The whole Metohija region has numerous  
pits where an excellent soft limestone is mined. *W. I.*

EXCERPTA MEDICA Sec.5 Vol.9/9 Gen.Pathology Sept 56

2650. VIG E, Dept. of Pathol. Anat., Med. Univ., Debrecen. \* Comparative studies of nucleic substances in ~~116Y18~~ and in necrosed tissues ACTA MORPH. ACAD. SCIENT. HUNG. (Budapest) 1956, 6/3 (275-287) Graphs 5 Tables 1 Illus. 4

Chemical and histochemical studies on the nucleic acids of the external part and the necrosed internal part of transplanted rat tumours showed that the desoxyribonucleic acid was not markedly different in the 2 zones but that the ribonucleic acid was greatly reduced in the necrotic tissue. Necrosis induced in the liver of rats by ligation of vessels produced very similar changes.

Woodhouse - Birmingham (V. 16)

VIG E.

Inst. für pathol. Anat., Med. Univ., Debrachen. \*Vergleichende Untersuchung der Nukleinstoffe von Lebenden und nekrotischen Geweben. Comparison of nucleinic substances of living and necrotic tissues ACTA PHYSIOL. ACAD. SCIENT. HUNG. (Budapest) 1954, 5/suppl. (15)

SO: EXCERPTA MEDICA - Section II, Vol. 7, No. 10

VIG, EDITH

✓ Comparative studies of nucleic substances in normal and in necrosed tissues. Edith Vig (Med. Univ., Debrecen). *Acta Morphol. Acad. Sci. Hung.* 6, 275-87 (1950) (in English).  
Guérin's transplanted rat tumor was used as the test object and nucleic acids were detd. by the method of Schmidt and Thannhauser (*C.A.* 40, 2181<sup>4</sup>). Equal. aunts. of deoxyribonucleic acid were found in normal and in necrosed tissue, but less ribonucleic acid in the latter. Similar results were obtained in liver necrosis induced by ligation of a hepatic lobe. The results of histochem. studies agreed with the chem. detns. H. B. Collier

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SUGAR, Janos, Budapest XII, Rath Gy. u. 5 Hungary,; VIQ, Edit, Debrecen 12  
Kozegeszsegstani Int. Hungary.

The effect of nitrogen mustard on the acridine orange uptake of  
Ehrlich ascites tumor cells. Acta morph. hung. 6 no.1:15-24 1955

1. Dept. of Pathological Anatomy of the Medical University, Debrecen  
Director Prof. B. Kellner.

(NEOPLASMS, experimental,

Ehrlich ascites carcinoma, eff. of nitrogen mustards  
on acridine orange uptake)

(ACRIDINE DYES, metabolism,

Ehrlich ascites carcinoma cells, eff. of nitrogen mustards  
on uptake)

(NITROGEN MUSTARDS, effects,

on Ehrlich ascites carcinoma acridine orange uptake)

VIC, I.

"Guiding Principles in Developing Work Methods of Factory Managers and Foremen", P. 27. (TOBTERELES, Vol. 8, No. 4, April 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (EFAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.

VIG, I.

"Rules of Procedure for Factory Managers and Foremen in the Telephone Factory", P. 32. (TOBETTES, Vol. 8, No. 4, April 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (ETAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.



VIG, Istvan

High-power engines: the key factor in the development of  
the automotive industry. Musz elet 20 no.5:4 11 Mr '65.

VIC, I.

"Preparation of Lists of Norms for Worn-Out Parts", P. 30. (TORBENTILES,  
Vol. 8, No. 4, April 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 4,  
No. 1, Jan. 1955, Uncl.

VIG, Istvan; POTORKE, Lajos

Level of the assembly technology of the Hungarian telecommunication industry. Finommechanika 1 no.9:270-274, 280 S '62.

1. Híradastechnikai Központi Technológus Csoport.

VIG, I.

VIG, I. - Technological level of the telecommunications; a lecture.  
p. 106, Vol. 7, no. 4, Aug. 1956  
Magyar Híradastechnika - Budapest, Hungary

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

VIG, Istvan

Technical problems of the electric power production; a statement of Sandor Csenterics, assistant minister of the heavy industry. Muzs clst 15 no.26:6 '61.

VIG, Istvan

Argonarc welding; what are the causes of its little use? Must elot 16  
no.14:5 Ji '61. (KEAI)

(Electric welding)

VIG, Istvan

The Hungarian production of electric locomotives will be placed upon new foundations. Musz elet 16 no.18:4 '61.

VIG, Istvan

On the work of the Institute for Designing and Developing Milling  
Machinery. Musz elet 16 no.20:2 '61.



VIG, Istvan

The fate of an "iron-testing" equipment. Musz elet 17 no.2:  
7 Ja '62.

VIG, Istvan

Twenty thousand buses instead of two thousand. Musz elet 17 no.25:  
6 6 D '62.

VIG, Istvan

Technical development problems in the Hungarian motorbus  
production. Musz elet 18 no.9:5 25 Ap '63.

VIG, Istvan

Up-to-date engine: key issue of the Hungarian autobus manufacture.  
Muzs elet 18 no.13:3 20 Je '63.

VIG, Istvan

How to solve our problem with silicon diode? Musz elet 18  
no.16:4 1 Ag '63.

VIG, Laszlo Endre

Extinguishing electric oil fires by water fog; transformer  
fires and safety appliances. Epuletgepeszet 13 no. 2:65-70  
Ap '64.

VIKSHRAYTIS, Ch. Yu., Cand Med Sci -- (diss) "Diagnostics of disorders of the functions of the ovaries in infertile women." Vil'nyus, 1960. 15 pp; (Ministry of Higher and Secondary Specialist Education USSR, Vilnyus State Univ im V. Kapsukas); 250 copies; price not given; (KL, 27-60, 159)

VIG, O.P.; LEVINA, R.Ya.

New synthesis of 2-arylcyclohexen-2-ones. Zhur.ob.khim. 31 no.6;  
1817-1818 Je '61. (MIRA 14:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.  
(Cyclohexenone)



VIG, G.P.

Synthesis of *dl*-dihydrocarvone. Zhur. ob. khim. 31 no. 2:666-  
672 P 1961. (E.A. 14:2)

1. Khimicheskii fakul'tet Pondshtabskogo universiteta, Indiya.  
(Carvone)

BARKAN, Ya.D., inzh.; VIGA, A.Ya., inzh.; VONSOVICH, M.Ya., inzh.

Some problems of the automation of voltage regulation. Elek.  
sta. 34 no.9:17-23 S '63. (MIRA 16:10)

FAL'KOVSKIY, S.V., inzh.; ZAKHAROV, Ye.S., inzh.; VIGAK, V.M., inzh.;  
YASKILKO, N.B., inzh.; BULYGIN, Yu.G., inzh.; PASICHNIK, I.I., inzh.

Using strain gauges for a full scale investigation of the steam  
pipes of the 200 Mw unit. Teploenergetika 9 no.1:32-36 Ja '62.  
(MIRA 14:12)

1. Yuzhnoye otdeleniye Gosudarstvennogo tresta po organizatsii i  
ratsionalizatsii elektrostantsiy.

(Steam pipes—Testing)  
(Boilers)

S/096/63/000/001/006/006  
E194/E155

AUTHORS: Zakharov, Ye.S., Engineer; Vigak, V.M., Engineer;  
Baryshnikov, A.P., Engineer; and Zamora, T.P.,  
Engineer.

TITLE: The measurement of stress at high temperature by means  
of self-compensating wire strain gauges

PERIODICAL: Teploenergetika, no.1, 1963, 68-70

TEXT: In making strain gauge measurements at high and  
possibly varying temperatures, the main gauge is usually glued to  
the part and a compensating gauge, which allows for changes in  
gauge wire resistance with temperature, is usually fixed to an  
unstrained lamina of the same material as the part under stress.  
This is not entirely satisfactory because, amongst other things,  
the two gauges do not receive the same heat treatment. In one  
particular case of measurements at 300 °C there were errors of up  
to 8 kg/mm<sup>2</sup>. A new procedure uses four strain gauges set at angles  
of 45° to one another, alternate gauges being connected back-to-  
back for temperature compensation. Two further gauges are at right  
angles to one another on a lamina of the material under test which

Card 1/3

The measurement of stress at high ... S/096/63/000/001/006/006  
E194/E155

is fixed to the test part at its two ends so that strain in it is unidirectional. Formulae can then be derived for the principal stresses in the part under test. If it is known that the position investigated is only in tension, or if the part is flat, three pairs of strain gauges each mounted on a lamina fixed to the part at the two ends may be used to determine the principal stresses. This has the advantage that all the gauges can be fixed to the lamina under laboratory conditions so that correct heat treatment is ensured. The procedure was checked by making bending tests on a steel beam at various temperatures between 20 and 300 °C, and gave fair agreement between the known stress and the indications of the gauges. The error is attributed to increased stiffness of the metal where the strain gauge laminae were attached, and would not arise in large components. The tests showed that the strain-gauge lamina operated satisfactorily both in tension and compression on a flat part. Accordingly, there is no need to fix gauges directly to parts which are either flat or convex in tension. In other cases four strain gauges are fixed to the part at 45° to one another, together with a lamina with two gauges, in order to

✓

Card 2/3

The measurement of stress at high ... S/096/63/000/001/006/006  
E194/E155

determine the principal stresses. Application of the method to stress determination in the flanges of a steam turbine is described.

There are 3 figures.

ASSOCIATION: Yuzhnoye otdeleniye ORGRES  
(Southern Division of ORGRES)

Card 3/3

VIGAK, V.M., inzh.; FAL'KOVSKIY, S.V., inzh.

Stresses in steampipes due to their own weight and choice of  
supports and suspensions. Elek. sta. 35 no.11:31-34 N 161.  
(MIRA 18:1)

VIGAK, V.M., inzh.; FAL'KOVSKIY, S.V., inzh.

Determination of actual stresses in the steam lines of a 300 Mw.  
block. Teploenergetika 11 no. 1:22-27 Ja '64. (MIRA 17:5)

1. Yuzhnoye otdeleniye Gosudarstvennogo tresta po organizatsii  
i ratsionalizatsii ravonnykh elektrostantsiy i setey.



TELESHOVA, M.N.; VIGALOK, R.V.; VASIL'YEVA, A.A.

Investigating the individual hydrocarbon composition of  
gasolines. Neftoper. i neftekhim. no. 11:27-30 '63.  
(MIRA 17:5)

1. Tatarskiy nauchno-issledovatel'skiy institut, g. Kazan'.

I. 21103-65 EWT(m)/EPF(c)/T Pr-4 WE/RM

ACCESSION NR: AP4049721

S/0318/64/000/001/0013/0015

AUTHOR: Teleshova, M. N., Vigalok, R. V.

TITLE: Recovery of benzene and toluene from hydrocarbon mixtures by means of 13Kh-type zeolite

SOURCE: Neftepererabotka i neftekhimiya, no. 1, 1964, 13-15

TOPIC TAGS: petroleum refining, benzene isolation, toluene isolation, column chromatography, zeolite adsorbent/zeolite 13Kh

ABSTRACT: Experiments on the recovery of benzene were conducted with the 60-650 gasoline fraction distilled with the TSIATIM-58 apparatus; its benzene content was 40-45%. The adsorption was carried out at 100°C and the benzene was recovered in the pure form from the zeolite.

zeolite has several advantages over silica gel as an adsorbent for the recovery of benzene from the gasoline fraction.

Card 1/2

L 21103-65

ACCESSION NR: AP4049721

of benzene and toluene from hydrocarbon mixtures under laboratory conditions.  
Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Tatarskiy nauchno-issledovatel'skiy institut, g. Kazan' (Tatar  
Scientific Research Institute, Kazan)

SUBMITTED: 00 \*

ENCL: 00

SUB CODE: FP, OC

NO REF SOV: 005

OTHER: 000

Card 2/2

KHARKHURIM, I.M.; VIGALOK, S.G. (Chkalov)

Pathoanatomical changes in the lungs following inhalation of hot  
air; experimental and morphological studies [with summary in English].  
Arkhn.pat. 19 no.8:29-31 '57. (MIRA 10:12)

(LUNGS, physiology,

eff. of hot air inhalation in dogs (Rus))

(HEAT, effects,

hot air inhalation on lungs in dogs (Rus))

VIGALOK, S.G.; KLIMOV, G.I. (Penza)

Case of a prolonged stay of a foreign body (coin) in the duodenal  
bulb. Vest. rent. i rad. 39 no.5:61 S-O '64.

(MIRA 18:3)

VIGAND, A.G., inzh.; KRAUSS, L.A., inzh.; ALEKHIN, A.D.

Use of a multiple position relay control of the asynchronous engine for the automation of mine hoists. Ugol' 37 no.5:35-39  
My '62. (MIRA 15:6)

1. Giprouglegormash i treost Oktyabr'ugol'.  
(Mine hoisting) (Automatic control)

SOURCE: *Prilozheniye k spetsial'noi teorii i praktike, Seriya 1, Abt. 9A415*

AUTHOR: Vigand, A. G.; Siper, A. M.; Karagins, A. A.

TOPIC TAGS: *telemeter, telemeter system, pulse time telemetering*

CITED SOURCE: *Prilozheniye k spetsial'noi teorii i praktike, Seriya 1, Abt. 9A415, 1964, 230-232*

TOPIC TAGS: telemeter, telemeter system, pulse time telemetering

TRANSLATION: The principle of operation and design of an electromagnetic converter of pulse duration into digital-disk angle are described. The converter includes a shaft rotating at a constant speed, electromagnetic holding and measuring couplings rigidly fastened to brackets and digital disks freely rotatable on the shaft. With no pulse the measuring coupling is de-energized, and the digital disk is held in position by the holding coupling. When a pulse is applied, the holding coupling is de-energized and the measuring coupling is energized, causing it to attract the digital disk and causes its engagement with a friction disk rigidly fastened to the shaft. The friction disk rotates the digital disk. By the end of the pulse, the

Card 1/2

L 57604-65

ACCESSION NR: AR5000577

couplings are switched, and thus the angle of the digital disk is proportional to the pulse duration. The readings are retained until the plant scanning cycle has been finished, after which the readings may be cleared by a re-setting frame. Two illustrations.

SUB CODE: EG, IE

ENCL: 00

Card 2/2



CHAMBERLAIN, O.; SEGRN, E.; ~~VIGAND, K.~~; IPSILANTIS, T.

Antiproton observations. O. Chamberlain and others (From: Phys.  
rev. 100 no.3, 1955). Usp.fiz.nauk 58 no.4:685-692 Ap '56.  
(MLRA 9:8)  
(Particles, Elementary) (Protons)

VIGAND, N. K.

A portable dryer for fruits, berries and vegetables Moskva, Gos. izd-vo, 1921. 13 p.

VIGANDT, A. G., CAND TECH SCI, "EXPERIENCE <sup>in the use of</sup> OF APPLYING <sup>the</sup> RELAY CONTROL IN AUTOMATION OF SKIP HOISTING <sup>devices</sup> INSTALLATIONS WITH ASYNCHRONOUS DRIVE IN THE KARAGANDA COAL BASIN." SVERD-  
LOVSK, 1961. (MIN OF HIGHER AND SEC SPEC ED RSFSR. SVERD-  
LOVSK MINING INST IMENI V. V. VAKHRUSHEV). (KL-DV, 11-61,  
218).

VIGANDT, A.G., inzh.

Closed relay control system of the asynchronous motor of a mine hoist. Izv. vys. ucheb. zav.; gor. zhur. no.11:99-107 1959.

(MIRA 14:5)

1. Karagandinskiy politekhnicheskiy institut. Rekomendovana sektsiyey gornoy i obshchey elektrotekhniki.

(Automatic control)

(Mining hoisting)

VIGANDT, A.G., inzh.

Stability of a relay control on an asynchronous hoist drive. Izv.  
vys. ucheb. zav.; gor. zhur. no. 12:83-88 '59. (MIRA 14:5)

1. Karagandinskiy politekhnicheskii institut. Rekomendovana kafedrami  
obshchey i gornoy elektortekhniki.  
(Electric motors, Induction) (Mine hoisting)

VIGANDT, A.G., inzh.

Ways of stabilizing transients in a relay control of an  
asynchronous drive of a mine hoist. Izv. vys.ucheb. zav.;  
gor. zhur. no.5:93-100 1960. (MIRA 14:3)

1. Karagandinskiy politekhnicheskii institut. Rekomendovana  
kafedroy gornoy elektrotekhniki.

(Electric motors, Induction)  
(Automatic control)

BYR'KA, V. F., inzh.; VIGANDT, A. G., inzh.; TIKHONOV, V. Ya., inzh.

Automatic control of production processes in the Karaganda  
Basin coal mines. Izv. vys. ucheb. zav.; gor. zhur. no.10:121-  
124 '61. (MIRA 15:10)

1. Karagandinskiy nauchno-issledovatel'skiy ugol'nyy institut  
(for Byr'ka). 2. Karagandinskiy politekhnicheskii institut (for  
Tikhonov). Rekomendovana Karagandinskim politekhnicheskim  
institutom.

(Karaganda Basin—Coal mines and mining)  
(Automatic control)

ZAKHAROV, Ye.G., FAL'KOVSKIY, S.V.; VIGANK, V.M.; RATNER, A.V.,  
kand. tekhn. nauk, red.

[Experience in the installation and adjustment of steam-  
pipes in blocks with 150 and 200 Mw. ratings] Iz opyta  
montazha i naladki paroprovodov blokov moshchnost'iu 150  
i 200 Mwt. Moskva, Biuro tekhn. informatsii, 1964. 36 p.  
(MIRA 18:5)



VIGANT, YE. I.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress, Moscow, Jun-Jul '56,  
Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237, pp.

Myshkis, A. D. (Minsk), Vigant, Ye. I. (Riga), Lepin, A. Ya.  
(Minsk). Improper Integrals in  $n$ -space.

91-92

VIGANT, E. I. -- "Unnatural Integrals in n-Dimensional Space." Belorussian State U imeni V. I. Lenin. Minsk, 1955. (Dissertation for the Degree of Candidate of Physicomathematical Sciences.)

So; Knizhnaya Letopis', No 3, 1956

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859720002-7

VIGANT, L. I.

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859720002-7"

SHAGOVA, Yevgeniya Nikolayevna; GLOTSER, Lev Moiseyevich; VIGANT, Tamara  
Avgustovna; MUZYIL'EV, L.F., nauchnyy red.; SEGAL', N.M., red.;  
DMITRIYENVA, N.I., tekhn. red.

[Carding machines of the Befama and Textima companies] Oshesal'nye  
mashiny firm Befama i Tekstima. Moskva, Gos. nauchno-tekhn. izd-  
vo lit-ry legkoi promyshl., 1958. 107 p. (MIRA 11:10)  
(Carding machines)

MARINCHENKO, P., inzhener-polkovnik; VIGANT, V., inzhener-podpolkovnik;  
YEGOROV, M., podpolkovnik tekhnicheskoy sluzby; KOCHKIN, P.,  
inzhener-mayor

Mechanizing the cleaning of reservoirs and oil tankers. Tyl  
i snab. Sov. Voor. Sil 71 no.9:92-94 S '61. (MIRA 14:12)  
(Tank vessels--Cleaning)

1. J. VIGANTS
2. USSR (600)
4. Beets and Beet Sugar
7. Ensilage of sugar beet leaves in stacks. Latv. PSR. Zin. Akad. Vestis no. 10. 1951.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

VIGAS, Andrej

The Commission for welding is an efficient help in reaching higher standards in welding. Zvaranie 11 no.8:247 Ag '62.

1. Krajska rada Ceskoslovenske vedecko-technicke spolecnosti,  
Banska bystrica.

VIGAS, Andrej

Enterprise branches of the Czechoslovak Scientific Technical Society assuming tasks in honor of the 12th Congress of Communist Party of Czechoslovakia. Tech praca 14 no.5:380 My '62.

1. Krajska rada Ceskoslovenske vedecko-technicke spolecnosti, Banska Bystrica.



CZECHOSLOVAKIA

VIGAS, M; NEMETH, S; KVETNANSKY, R

Institute of Endocrinology, Slovak Academy of Sciences  
(Endokrinologický ústav Slovenskej akadémie), Bratislava  
- (for all)

Bratislava, Bratislavské lekárske listy, No 1, January 1966,  
pp 42-46

"The metabolic reaction of the organism to stress, and some  
of its hormonal mechanisms."

NEMETH, S.; VIGAS, M.

Glucose metabolism in the rabbit during induced fever. Physiol.  
bohemoslov, 12 no.2:124-127 '63.

1. Institute of Endocrinology, Slovak Academy of Sciences, Bratislava.  
(GLUCOSE) (CARBOHYDRATE METABOLISM) (FEVER)  
(GLUCOSE TOLERANCE TEST) (PYROGENS) (BODY TEMPERATURE)

NEDETH, S.; VIGAS, F.

Changes in the levels of glucose, pyruvate and phosphate in the blood of rabbits under the influence of various doses of endotoxin. Physiol. Bohemosl 13 no.5:521-524 '64.

The metabolism of pyruvic acid during endotoxin induced fever in rabbits. Ibid.:525-528

1. Institute of Endocrinology of the Slovak Academy of Sciences, Czechoslovak Academy of Sciences, Bratislava.

CZECHOSLOVAKIA

VIGAS, M., KVERNANSKY, R., NEMETH, S., MIKULAJ, L; Endocrinological Institute, Slovak Academy of Sciences (Endokrinologický Ustav SAV) Bratislava.

"Change in Metabolic Response to Stress in Adapted and Non-Adapted Rats After the Blockage of Enzymatic Degradation of Catecholamines.

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 96

Abstract: Stress was induced by immobilization for 4 hours; the stress induces hyperglycemia, hyperphosphatemia, hyperpyruvatemia, and an increase in the level of nonesterified fatty acids in the plasma. The reaction of adapted animals is less pronounced. 40 mg of pyrogallol administered to nonadapted rats before immobilization reduced their hyperglycemia response to the stress to the level of adapted rats. It seems that the reduction of catecholamines in blood and the resulting reduced metabolic response of the organism are due to an accelerated degradation by catechol-O-methyltransferase. No references. Submitted at "16 Days of Physiology" at Kosice, 28 Sep 65.

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- 138 -

CZECHOSLOVAKIA

KVEPNANSKY, R., ~~VIGAS, M.~~ NEMETH, S., MIKULAJ, L; Endocrinological Institute, Slovak Academy of Sciences (Endokrinologický Ústav SAV), Bratislava.

"Some Metabolic Changes in the Course of an Immobilization Stress in Rats and Their Possible Hormonal Bases."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 97

Abstract: Immobilization was studied for a 4-hour period. Glycemia occurs in two phases; pyruvic acid in blood increases immediately, and then decreases slowly. Inorganic P begins to drop after 2 hours. Administration of dihydroergotamine (DHE) did not influence pyruvic acid levels, but inorganic P did not drop. DHE did not influence corticosterone levels during the fixation. Rats with induced alloxan diabetes did not have a 2-phase reaction. No references. Submitted at "16 Days of Physiology" at Kosice, 28 Sep 65.

1/1

- 139 -

CZECHOSLOVAKIA

NITRO, A., ~~NEMETH, S.~~ VIGAS, M., SOKOLOVA, V; Endocrinological  
Institute, Slovak Academy of Sciences (Endokrinologicky Ustav  
SAV), Bratislava.

"Study of Morphological Changes in Adrenal Cortex of Rats Subjected  
to Thyroidectomy Under Influence of an Acute Trauma."

Praque, Ceskoslovenska Physiologie, Vol 15, No 2, Feb 66, p 100

Abstract: 10 days after thyroidectomy, animals subjected to an acute  
acute trauma show changes in adrenal cortex when compared to  
normal animals; the content of corticosterone in the plasma is  
reduced. Changes in the distribution of fat in the adrenal  
glands between the animals that underwent the operation and con-  
trol animals are described. These differences may be due to the  
suppression of the adrenocorticotrophic function of the anterior  
lobe of the hypophysis due to the changed thyrotropic reaction  
after thyroidectomy. No references. Submitted at "16 Days of  
Physiology" at Kosice, 29 Sep 65.

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EXCERPTA MEDICA Sec 6 Vol 13/0 Internal Med Sent 50

5462. DISORDERS OF GLUCIDE METABOLISM IN PATIENTS WITH ACROMEGALY - Poruchy metabolismu glycidov u pacientov s akromegaliou - Vigaš M., Macho L. and Németh S. Endocrinol. Úst. Slovenskej Akad. Vied, Bratislava - BRATISL. LEK. LISTY 1958, 38(II)/6 (334-340)

Graphs 3

The dose of 25 g. of glucose used currently in i.v. loads is too high to detect disturbances in the metabolism of glucides in acromegalic patients. From 9 acromegalics, only in 3 patients was a disturbance of glucide metabolism found, evaluated by the assimilation coefficient when this dose was used. For the detection of more subtle disturbances of the metabolism of carbohydrates a lower load of 10g. of glucose is more convenient. In the same 9 patients with acromegaly, after the load thus modified, a disturbance of the metabolism of glucides was found in 7 cases.

(VI, 3\*)

VIGAS, M.; NEMETH, S.

Side-effects of dichlorisoproterenol and dihydroergotamine  
in blocking the effect of adrenaline on glycide metabolism.  
Bratisl. lek. listy 45 no.8:479-485 31 0 '65.

1. Endokrinologicky ustav Slovenskej akademie vied v Bratislave (riaditel MUDr. J. Podoba, CSc.).



NEMETH, S.; VIGAS, M.; LICKO, V.

On the role of the thyroid gland in the appearance of metabolic changes in induced fever. Bratisl. lek. listy 42 no.6:351-359 '62,

1. Z Endokrinologického ustavu SAV v Bratislave, riaditel MUDr.  
J. Podoba, C. Sc.

(FEVER exper) (FEVER THERAPY) (THYROID GLAND physiol)

BEDOSTOTSKIY, M.D.; VIGASIN, A.A.

"Ferroshevit" a new fertilizer for agriculture. *Bul.tekh.-ekon.inform.*  
*Gos.nauch.-issl.inst.nauch.i tekhn.inform.* 17 no.7:18-19 J1 '64.  
(MIRA 17:10)

VIGASIN, A. B.

K voprosu proektirovaniia i stroitel'stva zheleznoi dorogi v raione Krainego Severa.

[On the question of projecting and constructing a railroad in the northernmost region] / (Tekhnika zheleznykh dorog, 1945, no. 10/11, p. 31-33).

Discusses information gained in constructing the Pechora road.

DLC: Slavic unclass.

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

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H/008/61/014/006/008/009/010/011/012/013/014/015/016/017/018/019/020/021/022/023/024/025/026/027/028/029/030/031/032/033/034/035/036/037/038/039/040/041/042/043/044/045/046/047/048/049/050/051/052/053/054/055/056/057/058/059/060/061/062/063/064/065/066/067/068/069/070/071/072/073/074/075/076/077/078/079/080/081/082/083/084/085/086/087/088/089/090/091/092/093/094/095/096/097/098/099/100/101/102/103/104/105/106/107/108/109/110/111/112/113/114/115/116/117/118/119/120/121/122/123/124/125/126/127/128/129/130/131/132/133/134/135/136/137/138/139/140/141/142/143/144/145/146/147/148/149/150/151/152/153/154/155/156/157/158/159/160/161/162/163/164/165/166/167/168/169/170/171/172/173/174/175/176/177/178/179/180/181/182/183/184/185/186/187/188/189/190/191/192/193/194/195/196/197/198/199/200/201/202/203/204/205/206/207/208/209/210/211/212/213/214/215/216/217/218/219/220/221/222/223/224/225/226/227/228/229/230/231/232/233/234/235/236/237/238/239/240/241/242/243/244/245/246/247/248/249/250/251/252/253/254/255/256/257/258/259/260/261/262/263/264/265/266/267/268/269/270/271/272/273/274/275/276/277/278/279/280/281/282/283/284/285/286/287/288/289/290/291/292/293/294/295/296/297/298/299/300/301/302/303/304/305/306/307/308/309/310/311/312/313/314/315/316/317/318/319/320/321/322/323/324/325/326/327/328/329/330/331/332/333/334/335/336/337/338/339/340/341/342/343/344/345/346/347/348/349/350/351/352/353/354/355/356/357/358/359/360/361/362/363/364/365/366/367/368/369/370/371/372/373/374/375/376/377/378/379/380/381/382/383/384/385/386/387/388/389/390/391/392/393/394/395/396/397/398/399/400/401/402/403/404/405/406/407/408/409/410/411/412/413/414/415/416/417/418/419/420/421/422/423/424/425/426/427/428/429/430/431/432/433/434/435/436/437/438/439/440/441/442/443/444/445/446/447/448/449/450/451/452/453/454/455/456/457/458/459/460/461/462/463/464/465/466/467/468/469/470/471/472/473/474/475/476/477/478/479/480/481/482/483/484/485/486/487/488/489/490/491/492/493/494/495/496/497/498/499/500/501/502/503/504/505/506/507/508/509/510/511/512/513/514/515/516/517/518/519/520/521/522/523/524/525/526/527/528/529/530/531/532/533/534/535/536/537/538/539/540/541/542/543/544/545/546/547/548/549/550/551/552/553/554/555/556/557/558/559/560/561/562/563/564/565/566/567/568/569/570/571/572/573/574/575/576/577/578/579/580/581/582/583/584/585/586/587/588/589/590/591/592/593/594/595/596/597/598/599/600/601/602/603/604/605/606/607/608/609/610/611/612/613/614/615/616/617/618/619/620/621/622/623/624/625/626/627/628/629/630/631/632/633/634/635/636/637/638/639/640/641/642/643/644/645/646/647/648/649/650/651/652/653/654/655/656/657/658/659/660/661/662/663/664/665/666/667/668/669/670/671/672/673/674/675/676/677/678/679/680/681/682/683/684/685/686/687/688/689/690/691/692/693/694/695/696/697/698/699/700/701/702/703/704/705/706/707/708/709/710/711/712/713/714/715/716/717/718/719/720/721/722/723/724/725/726/727/728/729/730/731/732/733/734/735/736/737/738/739/740/741/742/743/744/745/746/747/748/749/750/751/752/753/754/755/756/757/758/759/760/761/762/763/764/765/766/767/768/769/770/771/772/773/774/775/776/777/778/779/780/781/782/783/784/785/786/787/788/789/790/791/792/793/794/795/796/797/798/799/800/801/802/803/804/805/806/807/808/809/810/811/812/813/814/815/816/817/818/819/820/821/822/823/824/825/826/827/828/829/830/831/832/833/834/835/836/837/838/839/840/841/842/843/844/845/846/847/848/849/850/851/852/853/854/855/856/857/858/859/860/861/862/863/864/865/866/867/868/869/870/871/872/873/874/875/876/877/878/879/880/881/882/883/884/885/886/887/888/889/890/891/892/893/894/895/896/897/898/899/900/901/902/903/904/905/906/907/908/909/910/911/912/913/914/915/916/917/918/919/920/921/922/923/924/925/926/927/928/929/930/931/932/933/934/935/936/937/938/939/940/941/942/943/944/945/946/947/948/949/950/951/952/953/954/955/956/957/958/959/960/961/962/963/964/965/966/967/968/969/970/971/972/973/974/975/976/977/978/979/980/981/982/983/984/985/986/987/988/989/990/991/992/993/994/995/996/997/998/999/1000

21.1000

AUTHOR:

Vigassy, József, Mechanical Engineer

TITLE:

Buckling measurement by exchange of fuel material

PERIODICAL:

Energia és Atomtechnika, v. 14, no. 6, 1961, 283 - 287

TEXT: The author presents a method of drawing conclusions for reactor design (especially for the case of substantial buckling) from the substitution of, may be, a small number of fuel elements for core material taken from an operative "basic" (or reference) reactor, which approaches the zone to be investigated as closely as possible in buildup, in the numerical value of material buckling, and in neutron spectrum. The material investigated is introduced into the "basic" reactor, and the differences of critical height, of critical radius, or of reactivity of the thus resulting two-core reactor are measured against the original state. The measuring arrangement is shown in Fig. 1. For the evaluation of the measurements, the author recommends formulas from R. Naudet's Mesure de reactivités par la méthode de remplacement (Service de Physique Math., SPM 322). The formulas are approximate, yet they call for elaboration. For the spherical reactor, the material

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Buckling measurement by...

buckling  $B^2 = (\pi/R)^2$ , for the finite cylindrical reactor, it is  $B^2 = (\pi/H)^2 + (2.4048/R)^2$ , where R is the extrapolated radius of the sphere, or of the cylinder, respectively, and H is the corresponding height of the latter. Calculations are presented for a system with mantle reflector and are based on the assumption that the zone is homogeneous, isotropic, and absorption is not too strong. Criticality is elevated, or lowered by adjusting the moderator level. I. One-group perturbation calculation: If the zone to be measured differs very little from the "basic" (or reference) zone, and the value of  $\Delta B^2/B^2$  is small, and the exchange of fuel elements takes place in a small area,  $\Delta B^2$  is calculated from the

formula  $\Delta B^2 = \delta B^2 \frac{\int_V \phi^2 dV}{\int_{V_1} \phi^2 dV}$ , where  $V_1$  is the volume of the exchanged

zone and V that of the active zone;  $\phi$  is the calculable one-group neutron flux. This formula serves as first approximation of exact flux calculation; its practical application is not reasonable, because it neglects the interaction of differing neutron spectra. II. The two-group calculation leads to intricate formulas, even in the case of the simplified

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